

MOZRZYMAS, J.

The solution of the Feynman—Gell—Mann equation in the spinor space. The finite dimensional representations of the Lorentz group. Bul Ac Pol mat 11 no.5:309-315 '63.

1. Institute of Physics, Wroclaw Branch, Polish Academy of Sciences. Presented by L. Infeld.

MOZRZYMAS, Jan

Theory of spinors of the group $\tilde{G} \times \tilde{G}'$; physical interpretation of the groups $\tilde{G}$ and $\tilde{G}'$. Acta physica Pol 25 no.6:819-824 Je '64.

1. Institute of Physics, Polish Academy of Sciences, Wroclaw.

JANKIEWICZ, C.; MOZRZYMAS, J.

Potentials of baryon charge and hypercharge. Bul Ac Pol mat 12
no. 5:281-286 '64.

1. Institute of Theoretical Physics, University, Wroclaw, and
Institute of Physics, Polish Academy of Sciences, Wroclaw Branch.
Presented by L.Infeld.

HUNGARY

FARKAS, Maria, KOZSA, Szabolcs, and DOMBOFFER, Szilard, Institute of Pathophysiology, University Medical School (Orvostudományi Egyetem Kórolettani Intézete), Pécs.

"The Effect of Hypoxic Hypoxia and Environmental Temperature on Body Temperature and Oxygen Consumption in the Course of Pyrogen-Induced Fever"

Budapest, *Acta Physiologica Academiae Scientiarum Hungaricae*, Vol 30, No 2, 1960; pp 155-159.

Abstract [Article in English; authors' English summary]: At ambient temperature below the thermoneutral zone of the normal rat, the response to hypoxia (breathing 12% oxygen) was the same in the animal with pyrogen-induced fever as in the untreated animal; oxygen consumption fell and deep body temperature declined. At an ambient temperature corresponding to the indifferent temperature of the untreated rat, however, oxygen consumption increased and deep body temperature declined in pyrogen-induced fever, whereas both oxygen consumption and body temperature increased in the untreated animal. The bearing of these results on the relationship of thermoregulatory responses and of the response to hypoxia is discussed. 6 References, of which 4 by Hungarian authors (3 of these in Hungarian journal). (Manuscript received 15 Oct 65).

1/1

MOZSAR, Andras, tanar (Szolnok)

Szolnok youths in Gyor. Munka 12 no.12:27 D '62.

1. Szakszervezeti Tanacs Sagvari Andre Muvelodesi Haza
honi mereti korenek es Kerdezz - felelek szakkorenek vezetoje.

MOZSAR, Kalman

Exchange of experience. Repules 16 no.8:5,8 Ag '63.

MOZSDENYI, Jozsef

Sports movement of factory workers. Munka 13 no.10:32-33
0 '63.

1. Szakszervezetek Veszprem Megyei Tanacsanak sportfelelose.

HUNGARY

ROKRI, S., FENR, O., and MOZSIK, G., of the Institute of Physiology
(Elektani Intezet) of the Debrecen Medical University.

"Study of Denervational Hypersensitivity in Sympathetic Ganglia"

Budapest, A Magyar Biológiai és Orvosi Tudományok Akadémiájának Közleményei,
Vol. 14, No. 1, 1965; pp 95-110.

Abstract [Authors' Hungarian summary, modified]: Authors studied the
change of sensitivity of the ggl. cerv. sup. of the cat, preganglionar-
ily denervated, comparing it with the intact ganglion on the other
side, with particular attention to the changes in the sensitivity of
the two acetylcholine-receptor systems, as well as the hypersensitivity
which had developed in the decentralized nictitating membrane. They
conclude that in the development of hypersensitivity the chief role is
played by the numerical increase of the free acetylcholine receptors
-as a result of the liberation of innervated receptors- and not the
individually changed sensitivity of individual receptors. [30 references,
mainly Western].

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- END -

CSC: 2000-M

FEHER, O.; LABOS, E.; MOZSIK, Gy.; SZABO, T.

Effect of d-tubecurarine, nicotine and individual tropane compounds
on the ganglionic transfer of excitation. Acta Physiol. Acad. Sci.
Hung. 20 no.2:177-186 '61.

1. Physiologisches Institut der Medizinischen Universitat, Debrecen.

(CURARE pharmacol)	(NICOTINE pharmacol)
(ATROPINE rel cpds)	(GANGLIA AUTONOMIC pharmacol)

HUNGARY

JAVOR, Tibor, GYRORFFY, Arpad, MOZSIK, Gyula, DOBI, Sandor, NAGY, Gyorgy;
Medical University of Debrecen, II. Medical Clinic (Debreceni Orvostudo-
manyi Egyetem, II. Belklinika).

"The Clinical Pharmacology of Parasympatholytic Compounds"

Budapest, A Magyar Tudományos Akadémia V. Orvosi Tudományok Osztályának
Közleményei, Vol XVI, No 2-3, 1965, pages 219-226

Abstract: [Authors' Hungarian summary] Clinico-pharmacological studies were carried out on parasympatholytic compounds. The following methods were used: measurement of secretion in the isolated parotid; biological titration of the compound excreted in the urine, bile and saliva; biological titration of the serum activity; quantitative determination of gastric secretion; measurement of gastric evacuation; study of gastric and duodenal motion. The above methods led to the successful qualitative and quantitative analysis of the compounds, determination of the parasympatholytic effect in man, determination of the effective dose of the compound, the mode of administration, the oral and parenteral rates. Data were obtained concerning the gastrointestinal resorption, excretion, eventual enterohepatic recirculation of the drug. Compounds referred to as N 399, N 685, N 640 as well as Priamid and Atropin were used for the study. The method is considered to be suited for the comparative study of parasympatholytic compounds. 5 Hungarian, 5 Western references. [Manuscript received 22 Jan 65.]

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L 10323-66

ACC NR: AP6003356

SOURCE CODE: HU/0018/65/017/002/0213/0218

AUTHOR: Mossik, Gyula—Mozhik, D.; Javor, Tibor—Yavor, T.

ORG: II. Medical Clinic, Medical University of Debrecen (Debreceni Orvostudományi Egyetem II. sz. Belklinika)

TITLE: Effect of parasympatholytica on the secretomotor activity of the parotid and stomach in man (a new clinicopharmacological test)

SOURCE: Kiserletes Orvostudomány, v. 17, no. 2, 1965, 213-218

TOPIC TAGS: experiment animal, biochemistry, gland, endocrinology, biologic secretion, drug effect, gastroenterology

ABSTRACT:

A simple, objective method has been developed to study the effect of parasympatholytica (psl) on glandular secretion in man. A sonde was introduced into one of the parotid glands. The extent of basal secretion before and after the administration of psl as well as the secretion responses to reflex stimulation (citric acid) and humoral stimulations (adrenalin, histamine) were determined. In addition to the study of parotid secretion, the inhibitory effect of psl on gastric secretion (HCl production) was also observed and the elimination of the drugs through the urine was determined by means of a biological titration method according to Magnus. It was found that: 1) the basal secretion of the parotid as well as its secretory response to reflex and humoral stimulations decrease following administration of psl; 2) in acute experiments, the duration of the secretory inhibition of the parotid is identical with that of the elimination

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L 10323-66

ACC NR: AP6003356

of the drug from the organism. The parotid secretion test reported is considered
to be suited for the objective study of the effect of psl on glandular secretion.
Orig. art. has: 3 figures and 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 03Jun64 / ORIG REF: 004 / OTH REF: 010

Card 2/2

JAVOR, T.; GYORFFY, A.; MOZSIK, Gy.; DOBI, S.; NAGY, Gy.

Clinical pharmacology of some parasympatholytic drugs. Acta
med. acad. sci. Hung. 21 no.3:272-277 1965.

1. Second Department of Medicine (Director: Prof. Gy. Jetrany),
University Medical School, Debrecen. Submitted January 21, 1965.

HUNGARY

MOZSIK, Gyula, JAVOR, Tibor, DOBI, Sandor, PETRASSY, Klara, SZABO, Andras;
Medical University of Debrecen, II. Medical Clinic (Debreceni Orvos-
tudományi Egyetem, II. sz. Belklinika).

"The Development of Denervational Hypersensitivity in Patients Treated With
Atropine."

Budapest, Kiserletes Orvostudomány, Vol XVIII, No 4, Aug 66, pages 353-358.

Abstract: [Authors' Hungarian summary] The parotid secretion of patients under prolonged treatment with atropine was studied before the treatment, during 2-4 weeks of treatment and 3-5 days after its cessation. The basal secretion and the extent of reflex responses to citric acid solutions and to humoral stimulation (acetylcholine, noradrenalin, histamine) were determined. It was found that the inhibitory effect of atropine on the parotid secretion is decreased during prolonged atropine treatment; this is not caused by a decrease in the amount of atropine in these patients. During 2-4 weeks of treatment, basal secretion and response to submaxillar stimulations were greatly increased while the response to supermaxillar stimulation remained largely unchanged. Response to noradrenalin increased greatly, to acetylcholine to a lesser extent. 3-5 days after cessation of the atropine treatment, basal secretion and response to noradrenalin returned to their original level while the response to acetylcholine decreased to a lesser extent. The conclusion was reached that a "pharmacological denervational hypersensitivity" develops during the 2-4 weeks of atropine treatment.

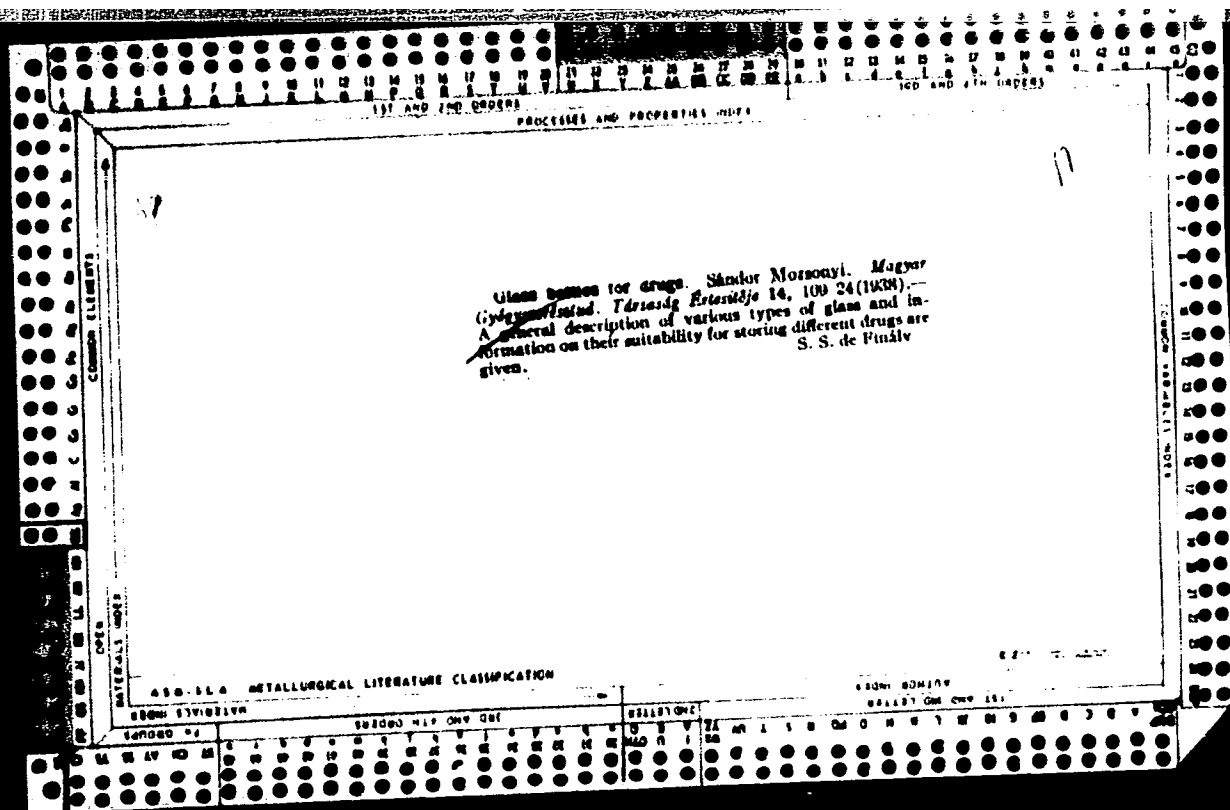
1/2

MOZSOLICS, Jozsefne

The opinion of Hungarian workers is always taken into consideration. Munka 13 no.6:10-11 Je '63.

1. Egyesult Izzo futotestgyartas szocialista brigadvezetoje.

1ST AND 2ND COLUMNS																										3RD AND 4TH COLUMNS																									
PROCESSES AND PROPERTIES INDEX																																																			
Coating powders or tablets with layers insoluble in the gastric juice. <i>Sándor Mészáros. Ber. ungar. pharm. Ges. 13, 275-93(1937).</i> Powders or tablets are first covered with a soln. consisting of 20 g. shellac, 5 g. anhyd. wood fat and 75 g. 96% alc., talcum is strewn on the surface, a coating of 20 g. shellac and 80 g. 96% alc. is applied and the products are dried at 20-25° for at least 24 hrs. The products should be tested for soly. in solns. similar to gastric and intestinal media. Gastric juice can be approximated by a soln. contg. 0.1% pepsin and 0.25% HCl; intestinal juice by a soln. contg. 0.1% pancreatin, 1% NaHCO₃, and 2% fresh ox bile. S. S. de Findly																										17																									
ASB-31.4 METALLURGICAL LITERATURE CLASSIFICATION																																																			



MOZSONYI, S.

Lecture on the 5th Hungarian Pharmacopeia, Jan.25, 1951.

Gyogyszeresz 6 no.6:131-132 1 June 1951. (CML 20:9)

1. Doctor.

MOZSONYI, S.:NEMEDY, I.

The preparation of calcium phosphate. *Gyogyszeres* 6 no. 10:237-
238 Oct 1951. (CML 23:5)

MOZSONYI, S.

Rose hip tea. *Gyógysszeres* 8 no. 1:17 Jan 1953. (CJML 23:5)

1. Doctor.

Mr. Zunder

*Charge and Discharge of a Nonlinear
Capacitor through a Linear Nondissip-
ative Inductance. -A. Moxmunder. (Z.
angew. Math. Phys., 25th July 1957, Vol. 8,
No. 4, pp. 261-280.) Macdonald (J.
Gen. Phys., Aug. 1954, Vol. 22, No. 8,
pp. 1317-1322) has shown that for a
capacitor with a semiconductor as dielectric
the capacitance is proportional to $\frac{\sinh \alpha V}{\alpha V}$
where V is the voltage across the capacitor
and α is a constant. A circuit is analyzed
in which such a capacitor is connected in
series with a lossless inductance and a
direct-voltage source, and a comparison is
made with an exponential capacitor ($C \propto \exp \alpha V$). Applications to the generation
of rectangular and triangular waveforms
are indicated. See also 958 of 1955
(Macdonald & Brackman).*

*4
-444*

11/90 BSAW

MOZURAITIENE, A.

Cancer control in rural areas. *Sveik. Apaug. no. 4:48 '64.*

1. Padovinio felceriu-akuseriu punkto vedeja.

MOZYRSKIY, I.B., inzh.; LISTOPAD, A.F., inzh.

Transfer line for the manufacture of a body and bottom of an
electric socket. Khim.mashinostr. no.4:42-43 J1-Ag '63.
(MIRA 16:9)
(Electric apparatus and appliances)

Mozyrskiy, Ye.
MOZYRSKIY, Ye.

Using brigade work method in taxicab fleets. Avt. transp. 35 no.12:
28 D '57. (MIRA 11:1)

1. Zamestitel' upravlyayushchego Yushno-Kazakhstanskim avtotrestom.
(Taxicabs--Maintenance and repair)

MOZZHEGOROV, V.G.

Furacilin in veterinary practice. Veterinariia 32 no.12:65 D 155.

(MLRA 9:4)

1. Glavnyy veterinarnyy vrach Yarkovskogo rayona, Tyumenskey oblasti.
(FURALDEHYDE--THERAPEUTIC USE) (VETERINARY MEDICINE)

(FURALDEHYDE--THERAPEUTIC USE) (VETERINARY MEDICINE)

KOCHERGIN, P.G. (Kursk); YERMOLAYEV, A.D., (Ul'yanovsk); FASTER'SOVICH,
E.L. (Leningrad); MOZZHELIN, A.I.; LAVROV, V.A.; ZIMINA, A.

Discussion of new geography programs. Geog.v shkole 23 no.1:
63-74 Ja-F '60. (MIRA 13:5)

1. 176-ya shkola rabochey molodezhi Moskvy (for Mozzhelin).
2. 7-ya shkola rabochey molodezhi Kalinina (for Lavrov).
(Geography--Study and teaching)

MOZZHELIN, V.I., inzhener.

Improved choker rings. Izobr. v SSSR 2 no.3:17 Nr '57.

(MLRA 10:3)

(Lumbering--Machinery) (Wire rope)

MOZZHENKO, A.N.

Seismic logging sonda. Razved. i prom.geofiz. no.13:40-42 '55.
(Seismology) (Oil well logging) (MLRA 9:7)

MOZHENKO, A. N.

Construction of a 52-channel seismic station from two SS-26-51
26-channel stations. Rasved. i prom.geofiz. no.14.20-29 '55.
(Prospecting—Geophysical methods) (MLRA 9:1)

MOZHENKO, A.N.

~~SECRET~~
Electronic instrument for visual verification of damping of
seismographs. Revved. 1 prom. geofiz. no.14:29-31 '55.
(Seismometers) (MLRA 9:1)

MOZZHENKO, A.N.

Checking the polarity of seismographs. Razved.i prom.geofiz.
no.17:5-12 '57. (MIRA 10:12)

(Seismometers)

MOZZHENKO, A. N.

Instrument for seismic logging. Razved. i prom. geofiz. no. 29:
52-55 '59. (MIRA 13:1)
(Oil well logging)

FEDYNSKIY, V.V., doktor fiziko-matem. nauk, red.; SHIROKOV, A.S., red.; KO-
VALEVA, A.A., red.; GRATSANOVA, O.P., nauchn. red.; BORISOV, A.A.,
nauchn. red.; FEDYUK, V.I., nauchn. red.; KOTLYAREVSKIY, B.V.,
nauchn. red.; POMERANTSEVA, I.V., nauchn. red.; MOZZHENKO, A.M.,
nauchn. red.; LOZINSKAYA, A.M., nauchn. red.; SHNEYERSON, M.B.,
nauchn. red.; BOGDANOV, A.Sh., nauchn. red.; NIKITSKIY, V.Ye., nauchn.
red.; KUDYMOV, B.Ya., nauchn. red.; PETROV, L.V., nauchn. red.; KOMA-
ROV, S.G., nauchn. red.; GORBUNOV, G.V., nauchn. red.; DUNCHENKO, I.A.,
nauchn. red.; FEL'DMAN, I.I., nauchn. red.; POMETUN, D.Ye., nauchn.
red.; BEKMAN, Yu.K., ved. red.; VORONOVA, V.V., tekhn. red.

[Status and prospects for developing geophysical methods for mineral
prospecting] Sostoianie i perspektivy razvitiia geofizicheskikh meto-
dov poiskov i razvedki poleznykh iskopaemykh; materialy. Pod red. V.V.
Fedynskogo. Moskva, Gos. nauchno-tekhn. izd-vo nef. i gorno-toplivnoi
lit-ry, 1961. 623 p. (MIRA 14:11)

1. Nauchno-tekhnicheskaya geofizicheskaya konferentsiya, Moscow, 1959.
2. Ministerstvo geologii i okhrany neдр SSSR (for Fedynskiy, Petrov).
(Prospecting—Geophysical methods)

27114

S/65/61/000/001/1.4/007
A104/A127

3,9300

AUTHOR: Mozzhenko, A.N.

TITLE: Magnetic recording device of earthquakes and distant explosions

PERIODICAL: Akademiya Nauk Turkmenskoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 1, 1961, 33 - 38

TEXT: The article describes the design and performance of a magnetic recording device permitting 24-hour seismologic field observation designed by the author of the Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvetki (VNIIG-fiziki) Ministerstva geologii i okhrany nedr SSSR (All-Union Scientific Research Institute of Geophysical Exploration Methods of the Ministry of Geology and Protection of Mineral Resources of the USSR). The most outstanding features of this device are: compactness, simple design, reliable performance and economy. It consists of 1) field recording block and 2) reproduction and copy-recording block. The design and operation of individual units is as follows: Field recording block: Seismographs Z, X, Y (1) are connected to the outlet of the recording amplifier; the output tension of the amplified signal is transmitted to the magnetic heads of recorder. One of these heads receives

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Magnetic recording device ...

the second, minute and hour time mark pulses from a chronometer and pulse commutator (4). The chronometer is controlled by precise time signals from a receiving device. The tape is magnetized by 25 cps current from a high-frequency generator, consisting of two П 14 (P14) transistors. The block is fed by a 6 HKH -100 (6HKH-100) accumulator battery, the feeding current not exceeding 2.5 amp. ВЭГК (VEGK) seismographs with a natural frequency of 1 cps are used. The coil has two windings, one for the production of optimum damping, and the second of 0.02 mm wire which is connected directly to the control grid of the first stage of the amplifier. The feedback between the first and second stages ensures a maximum frequency characteristic within 0.4 - 0.5 cps. A device connected to the amplifier input performs the simultaneous transmission of the alternating current signal (for calibration of the amplitude) to all amplifiers via the dispersion resistance of grids R. An indicator determines the output intensity of the amplifier. The Тр-1 (Tr-1) transformer connected parallel to the anode load of the output stage is sufficiently inductive to allow the passage of frequencies up to 25 cps. Amplification is regulated by a R₁ potentiometer between the second and third stage of amplifier. The recorder is a two-motor mechanism pulling a 35 mm magnetic tape which is studded with five magnetic beads (core width 2.6 mm). The driving motor pulls the tape at 2.5 - 5 mm/sec and the movement is stabilized by

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Magnetic recording device ...

a regulator placed on the motor axis. A reducer of 750:1 total reduction ratio transmits the rotation to the tone-drum. The time mark commutator is a relay mechanism operating on second pulses from an aircraft chronometer. The 13 Ч-П (13 Ch-P) chronometer has a clock mechanism which emits a 0.5 sec pulse per second with the aid of the contact device and feeding battery. The Ч-П (US-P) receiver is a battery-fed superheterodyne and covers a range of 25 - 2,000 m. The time mark generator consists of two П-4-П (P-4-P) germanium triodes connected to the self-excitation circuit of an "oksifer" core transformer. The generator has separate magnetic head output windings which considerably decrease the interconnection between individual channels. The 6ННН-100 (6NKN-100) accumulator battery ensures a 30 hours performance of the recording block, at a real length of 300 m and 3 mm/sec recording speed. The total weight of the recording installation and auxiliary equipment is 85 kg. The block is protected by a damp and dustproof cover and operates at temperatures ranging from -10 to +40°C. The copy-recording and reproduction installation is shown in Figure 4. At a frequency of 50 cps the tone drum pulls the tape at 75 or 35 mm/sec. By varying the oscillation frequency of the feeding generator, the fraction speed of the tape can be adjusted with 50-105 and 60-20 mm/sec. In the reproduction amplifier the signal from the reproduction head is transmitted to tube amplifiers Vc and V. The

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Magnetic recording device ...

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reproduction amplifier is of the standard seismic type and its total amplification at 20 cps reaches 250-300 thousands. The winding of the input transformer was readjusted to match the resistance of the reproduction head and some frequency characteristics were altered. The modified amplifier is battery-fed and has five frequency characteristics beginning at 3 decibel: 12, 20, 40 and 60 cps. The performance of the V_m time mark amplifier is similar to V_0 . The C_m pulsometer is placed at the output of above amplifiers, and the galvanometer oscillograph carries out the photorecording of amplified signals from the magnetogram. A standard OC-24 (OS-24) oscillograph designed by the "Geofizika" Plant of the Moscow Sovnarkhoz and ЖНО-1 (ENO-1) cathode oscillograph were used. The author states that by applying the principle of frequency transformation a double gain is achieved, i.e. higher frequency and increased ЖАС (EDS) of signal [Abstracter's note: EDS not defined]. Tests carried out in various parts of the Turkmeneskaya SSR proved the suitability of the installation for the recording of seismic oscillations within a range of 0.4-12 cps. Conclusions: Continuous magnetic recording and conservation of recorded data for subsequent laboratory processing ensures a close survey of earthquakes and explosions. The transformation of infrasound frequency into low frequency permits the use of alternating current amplifiers of various frequencies for copy-recording. The method is recommended for elec-

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Magnetic recording device ...

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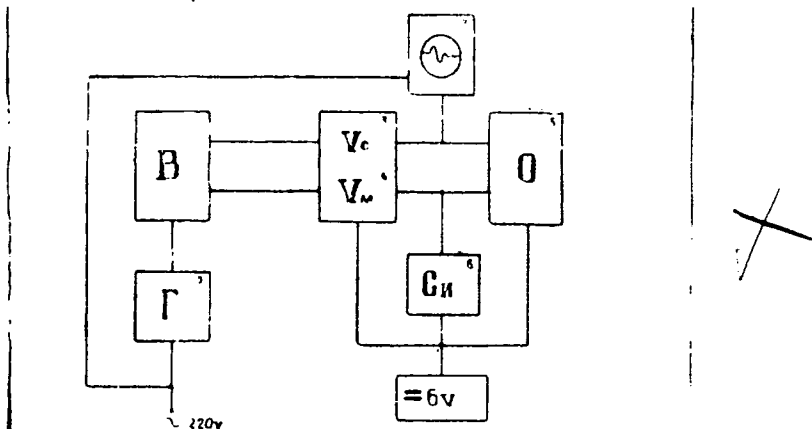
tromagnetic and profile exploration, as well as for logging. There are 4 figures.

ASSOCIATION: Sredneaziatskaya laboratoriya VNIIGeofiziki ([Soviet] Central Asia Laboratory of the All-Union Scientific Research Institute of Geophysical Exploration Methods)

SUBMITTED: March 1, 1960

Fig. 4:

Block diagram of the copy-recording installation



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MOZZHENKO, A.N.

Some interference in low-frequency seismic prospecting. ~~Received~~. 1
prom. geofiz. no.46:15-19 '62. (MIRA 16:3)
(Seismic prospecting)

S/169/63/000/003/036/042
D263/D307

AUTHOR: Mozzhenko, A.N.

TITLE: Low-frequency seismic apparatus

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 3, 1963, 11, abstract 3G49 (In collection: Glubinnoye seysmich. zondirovaniye zemn. kory v SSSR, L., Gostoptekhzdat, 1962, 439-446)

TEXT: A short description is given of the parameters of a low-frequency apparatus which allows recording in the range of 3-30 c/s: amplifiers of station CC-30/60H4 (SS-30/60NCh) and seismic receivers CH3H-1 and CH-3 (SPEN-1 and SN-3). Information is given of seismological station 'Zemlya', designed by VNI Geofizika (VNI of Geophysics). The apparatus consists of a recording block and reproduction. The recording is in the range of 0.25-10 c/s. The station ensures continuous recording on a magnetic tape, over days or longer periods. Only the useful signals are transcribed on an oscillogram. The apparatus was successfully tested in the seismically

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Low-frequency seismic apparatus

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D263/D307

active regions of Turkmenian SSR. Note was taken of the effects of atmospheric and industrial radio noises, which appeared to be of similar level and frequency as the seismic signals (after detecting the noises with elements of the input circuit). To eliminate the noises effectively it is necessary to use a seismograph of high accuracy, or a preliminary amplifier at the point of recording.

[Abstracter's note: Complete translation]

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POMERANTSEVA, I.V.; MOZZHENKO, A.N.; SOKOLOVA, I.A.; YEGORKINA, G.V.

Use of the "Zemlya" seismologic station for the study of the structure of the southeast of the Russian Platform. Dokl. AN SSSR 163 no.1: 171-174 J1 '65. (MIRA 18:7)

1. Submitted December 8, 1964.

L 06141-67 EWT(1) GW

ACC NR: AR6017546

SOURCE CODE: UR/0169/66/000/001/G017/G017

AUTHOR: Pomerantseva, I.V.; Mozzhenko, A.N.; Sokolova, I. A.; Yegorkina, G. V.

TITLE: Regional research with seismological stations "Zemlya"

SOURCE: Ref. zh. Geofizika, Abs. IG118

REF SOURCE: Tr. Nizhne-Volzhsk. n.i. in-t geol. i geofiz., vyp.2, 1964, 210-219

TOPIC TAGS: Earth, Earth core structure, ~~Earth~~ upper mantle, ~~structure~~, seismology, earthquake, seismologic station

ABSTRACT: Results are reported on regional research in the SE of the Russian platform concerning methodology for the study of the Earth core structure and upper mantle of the Earth by the seismological stations "Zemlya". With their aid it is possible to record waves on a magnetic film in a frequency range between .5 and 12 cycles. Rewriting of the field data at various frequency filtrations permits frequency analysis of the registered waves. Transformation of frequencies is used with the rewriting, permitting separation of waves with a fraction of a cycle frequency differences. Amplification of the station is 600,000 to 1,000,000. With the aid of the station, a reliable registration of earthquakes with epicentral distances of 11,000 to 14,000 km (Chile, Tonga islands), and explosions of 3t and over at distances of 200-300 km is possible. 1 to 10 events are usually registered during a 24 hour period. Earthquakes with epicentral distances of 200-800 km appear within the Ural region, nearer earthquakes take place wi-

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UDC 550.340

L 06141-67

ACC NR: AR6017546

thin the Russian platform limits. The obtained records of longitudinal, transverse and exchange waves enable the construction of an idea as to the structure of the Earth core and upper mantle. [Translation of abstract].

SUB CODE: 03, 08/

Card 2/2 MFE

MOZZHERIN, B.

Method of determining the need for craft used in roadstead maneuvering of ships. Rech. transp. 24 no.11:11-12 '65.

(MIRA 19:1)

1. Starshiy dispatcher Volgogradskogo uchastka Volzhskogo ob'yedinennogo rechnogo parokhodstva.

SAVIL, Vladimir Ivanovich, kand. tekhn. nauk; MOROZOV, Nikolay Petrovich, inzh.; MOZHEVIN, Boris Vasil'yevich, inzh.;

[Optimum use of transportation technology in ports and river terminals; manual for groups on the raising of qualifications of engineers and technicians in the Ministry of the River Fleet of the Russian Soviet Federated Socialist Republic] Optimal'noe ispol'zovanie peregruzochnoi tekhniki v portakh i prirechnykh nettebazakh; uchebnoe posobie dlia grupp povysheniia kvalifikatsii inzhenerno-tekhnicheskikh rabotnikov Ministerstva rechnogo Flota RSFSR. Gor'kii, Gor'kovskii in-t inzhenerov vodnogo transp. 1963. 33 p. (MIRA 17:8)

MOZZHERIN, V.G., inzh.

Machine constant of low-voltage unipolar generators. Sbor.
nauch.trud INI no.8:336-349 '58. (MIRA 13:4)
(Electric generators)

MOZZHERIN, V.G., inzh.

Unipolar machine with water cooling of the slip ring system.
Vest. elektroprom. 31 no.9:35-37 S :60. (MIRA 15:5)
(Electric generators)

MOZHLERIN, V.I., assistant

Effect of air ionization on the organism of young pigs.

Veterinariia 40 no.11:67-68 11 '63. (MIRA 17:9)

1. Bashkirskiy sel'skokhozyaystvennyy institut.

MOZZHERIN, Yu.V.

Routine-statistical immersion method. Zap.Vses.min.ob-va
94 no.5:516-529 '65.

(MIRA 18:11)

MOZZHERIN, Yu.V.

Using fine-grain conoscope technique in the microscopic study of
polished sections and its application in the universal-theodolite
method. Zap.Vses.min.ob-va 85 no.3:434-435 '56. (MLRA 9:11)
(Polariscope)

MOZZHERIN, Yu.V.

Conoscopy methods using low magnification obhectives with the Fedorov
universal stage. Zap.Vses.min.ob-va 88 no.4:490-491 '59.

(MIRA 12:11)

(Optical instruments)

MOZZHERIN, Yu.V.

Using a microscope as a refractometer. Zap. Vses. min. ob-va 89
no. 4:473-483 '60. (MIRA 13:11)
(Microscope) (Refractometer)

MOZZHEROVA, N. I.:

MOZZHEROVA, N. I.: "The limiting properties of harmonic functions in three-dimensional space." Acad Sci USSR. Mathematics Inst imeni V. A. Steklov. Moscow, 1956 (DISSERTATION for the Degree of Candidate in PHYSICOMATHEMATICAL SCIENCES.)

So: Knizhnaya letopis ', No. 24, 1956

AUTHOR: Mozzherova, N.I.

20-118-4-3/61

TITLE: Boundary Properties of Harmonic Functions in the Three-dimensional Space (Granichnyye svoystva garmonicheskikh funktsiy v trekhmernom prostranstve)

PERIODICAL: Doklady Akademii Nauk^{SSSR}, 1958, Vol 118, Nr4, pp 636-638 (USSR)

ABSTRACT: Let D be a domain of the threedimensional space and let D be bounded by a sufficiently smooth surface S . Given the Dirichlet and the Neumann problem

$$\Delta u = 0, \quad u|_S = f$$

$$\Delta v = 0, \quad \frac{\partial v}{\partial n}|_S = f.$$

As it is well-known, the differential properties of the solutions depend on f . The known results obtained in this direction by Smolitskiy etc. are extended by the author to the metric L_p and the classes $W_p^{(\alpha)}(r)$. The author uses the methods of the potential theory.

Card 1/2

There are 8 references, 7 of which are Soviet.

Boundary Properties of Harmonic Functions in the Three- 20-118-4-3/61
dimensional Space

ASSOCIATION: Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii
(All-Union Institute for Scientific and Technical Information)

PRESENTED: May 31, 1957, by S.L. Sobolev, Academician

SUBMITTED: September 28, 1956

AVAILABLE: Library of Congress

Card 2/2

Мозз Н е р о у а , Н . И .

507/2660

PHASE I BOOK EXPLORATION

3rd, Moscow, 1956

16(1)

Vsesoyuznyy matematicheskiy s"yezd. 3rd, Moscow, 1956
Trudy. t. 4. Eristovye soobrazheniya sektsionnykh dokladov. Doklady
Inostrannykh uchastnykh (Transactions of the 3rd All-Union Mathema-
tical Conference in Moscow. vol. 4. Summary of Sectional Reports.
Reports of Foreign Scientists) Moscow, Izd-vo AN SSSR, 1959.
247 p. 2,200 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Matematicheskii institut.

Tech. Ed.: G.M. Shevchenko; Editorial Board: A.A. Arkhrov, V.O.
Boltyanskiy, A.M. Vasil'yev, P.V. Medvedev, A.D. Myshkis, S.M.
Nikol'skiy (Resp. Ed.), A.A. Postnikov, Ya. V. Prokhorov, A.A.
Rybnikov, P. L. Ul'yanskiy, V.A. Uspenskiy, M.O. Chetaev, G. Ye.
Shilov, and A.I. Shirshov.

PURPOSE: This book is intended for mathematicians and physicists.

COVERAGE: The book is Volume IV of the Transactions of the Third All-
Union Mathematical Conference, held in June and July 1956. The
book is divided into two main parts. The first part contains a sum-
mary of the papers presented by Soviet scientists at the Con-
ference that were not included in the first two volumes. The
second part contains the text of those papers submitted to the editor
by non-Soviet scientists. In those cases when the non-Soviet sci-
entist did not submit a copy of his paper to the editor, the title
of the paper is cited and, if the paper was printed in a previous
volume, reference is made to the appropriate volume. The papers in
both Soviet and non-Soviet cover various topics in modern theory,
algebra, differential and integral equations, functional mathematics,
mathematical analysis, probability theory, topological mathematics,
problems of mechanics and physics, computational mathematics,
mathematical logic and the foundations of mathematics, and the
history of mathematics.

Koshlyakov, N.I. (Moscow). Boundary properties of harmonic
functions in three-dimensional space 49

Oshan, Ya. S. (Moscow). Representation of functions of bounded
variation by means of a generalized integral 50

Denisenko, I.M. (Moscow). On certain generalizations of
Laguerre polynomials which have significance for problems of
a one-dimensional wave propagation 50

Section on Functional Analysis

Berezanskiy, Yu. M. (Kiyev). On the inverse problem of spect- 53
ral analysis for the Schrödinger equation

Subbotitskiy, S.I. (Kiyev). On the approximation of abstract
functions by operator-functions in Hilbert space 53

Card 11/36

KUTEPOV, O.S., dots.; MOZZHEROVA, S.I., assistant

Translated publications should be carefully edited
("Weaving" by E.Grebner. Reviewed by O.S.Kutepov, S.I.
Mozzherova). Tekst.prom. 19 no.10:91-92 0 '59.
(MIRA 13:1)

(Weaving) (Editing)

W/62 L 06181-67 EWT(m)/ENP(j)/ENP(t)/ETI LJP(c) JD/WJ/JW/JWD/NE/RM
 ACC NR: AP6030705 (AN) SOURCE CODE: UR/0195/66/007/004/0734/0736 51
 AUTHOR: Boldyreva, A. V.; Mozzhova, V. N. B
 ORG: Institute of Chemical Kinetics and Combustion, CO AN SSSR (Institut
 khimicheskoy kinetiki i gorennya CO AN SSSR)
 TITLE: Nature of the effect of additives on the thermal decomposition of ammonium
 perchlorate 1 21
 SOURCE: Kinetika i kataliz, v. 7, no. 4, 1966, 734-736
 TOPIC TAGS: ammonium perchlorate, ~~perchlorate~~ perchlorate, thermal decomposition, combustion
 modifier, ammonium compound
 ABSTRACT: A study has been made of the character of the interaction of ZnO, CdO,
 and PbO with ammonium perchlorate. This work was prompted by recent interest in
 the effect of additives on the rate of thermal decomposition of ammonium perchlorate.
 Visual observation of pellets of ammonium perchlorate mixed with CdO, ZnO, and
 PbO (1-20%) on heating to 300C in a special chamber, and IR spectroscopy and
 solubility tests on the mixture before and after the decomposition were carried out.
 It was shown that on ammonium perchlorate decomposition in the presence of CdO, ZnO,
 or PbO, chemical reactions take place between the mixture components to form per-
 chlorates of the appropriate metals. [W.A. 68] [SM]
 SUB CODE: 07,20/ SUBM DATE: 08Oct65/ ORIG REF: 002/ OTH REF: 009/
 Card 1/1 da UDC: 541.17

MOZZHUKHIN, A.S.

42622. K Voprosu O Roli Uglevodnogo Obmena V Podderzhanii Toka Povrezhdeniya. Byulleten' Eksperim. Biologii i Meditsiny. 1948, No. 12, S. 412-13.

USSR/Medicine - Muscles
Medicine - Formalin, Effects
Jan 49

"Effect of Formalin on the Rest Current of a Trans-
versely Striated Muscle," A. Mozzhukhin, Chair of
Physiol Mil Med Acad imeni S. M. Kirov, 8 pp

"Fisiol Zhur SSSR" Vol XXXV, No 1

Ethyl alcohol has effect similar to formalin in
preserving the rest current of a fixed muscle.
Both substances are injurious. Chemical agents
which disrupt material exchange in muscles cause
some decrease in the rest current. This is notice-
able before and after fixation of the muscle (data
agrees with that reported by Mikhel'son in 1935).

47/49T65

USSR/Medicine - Muscles (Contd) Jan 49

Concludes it is possible to establish a relation-
ship between a major part of the rest current and
the material exchange in muscles.

47/49T65

MOZZHUKHIN, A.S.

1. LEBEDINSKII, A.V.; MOZZHUKHIN, A.S.
2. USSR (600)
4. Chagovets, V.IU.
7. I.P. Pavlov on the work of V.IU. Chagovets, A.V. Lebedinskii, A.S. Mozzhukhin, Fiziol, zhur. 39 no. 2, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

~~MOZZHUKHIN, A.S.~~

Simultaneous measurement of electromotive force and current
(quantity of electricity) as a method for investigating bioelectric
phenomena [with summary in English]. Biul.eksp.biol. i med. 44
no.11:114-117 N'57 (MIRA 11:11)

1. Iz kafedry fiziologii Voenno-meditsinskoy ordena Lenina Akademii
imeni S.M. Kirova, Leningrad. Predstavlena akademikom L.A. Orbeli.
(ELECTROPHYSIOLOGY,

simultaneous measurement of electromotive force &
current as method of study of bio-electric phenomena
(Rus))

Mozzhukhin A.S.

MOZZHUKHIN, A.S.

Effect of sequelae of pancreatectomy on electromotive force of injury and excitation of the skeletal muscle [with summary in English].
Fiziol.shur. 44 no.1:18-22 Ja '58 (MIRA 11:3)

1. Voenno-meditsinskaya ordena Lenina akademiya im. S.M.Kirova, Leningrad.

(MUSCLES, physiology,

eff. of pancreatectomy on electromotive force potential of inj. & excitation (Rus)

(PANCREAS, effect of excision,

on musc. electromotive force potential of inj. & excitation (Rus)

5(3)

SCV/19-59-7-148/369

AUTHORS: Rachinskiy, F.Yu., Mozzhukhin, A.S., Slavachevskaya,
N.M. and Tank, L.I.

TITLE: A Method of Increasing Stability of Fats

PERIODICAL: Byulleten' izobreteniy, 1959, Nr 7, p 32 (USSR)

ABSTRACT: Class 23a, 3. Nr 118935 (610725 of 30 October 1958).
The above method deals with checking the originated
oxidation process, and with reduction of both, per-
oxide numbers and inactiveness of metals. To insure
this, the following substances are added into the
fats: aliphatic polyamines, and particularly water
and fat-soluble polyethylenepolyamines and fat-sol-
uble derivatives of ethylenediamine and polyethylene-
polyamines.

Card 1/1

MOZZHUKHIN, A.S.

Changes in venous pressure in acute radiation sickness in rabbits.
Voen.-med.zhur. no.8:21-23 Ag '59. (MIRA 12:12)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.
(BLOOD PRESSURE radiation eff.)
(RADIATION INJURY exper.)

MOZZHUKHIN, A.S.

Changes in the carotid sinus reflex in acute radiation sickness. Med.rad. 4 no.7:32-36 J1 '59. (MIRA 12:9)

1. Iz Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova.

(RADIATION INJURY exper.)

(REFLEX radiation eff.)

21.6300

5.3900

~~5(3), 17(10)~~

AUTHORS:

67748

Rachinskiy, F. Yu., Mozzhukhin, A. S.,
Slavachevskaya, N. M., Tank, L. I.

SOV/74-28-12-23/25

TITLE:

Chemical Prophylactics Against Acute Radiation Disease

PERIODICAL:

Uspekhi khimii, 1959, Vol 28, Nr 12, pp 1488-1522 (USSR)

ABSTRACT:

With this review, the authors wished to provide an aid to facilitate search of new, efficient protective agents against the deteriorating effect of ionizing radiation. The search of rational ways to protect organism against the action of radiation is based on the study of primary processes connected with the influence of radiation on organism. By numerous investigations (Refs 3, 15 to 29), it has been established that during the first phase of the action of ionizing radiation on organism, energy absorbed by the tissue is manifested by a series of chemical reactions. The deteriorations observed are the consequences of chemical alterations of some macromolecules occurring in the biosubstrate. From these fundamental concepts, modern ideas result on the possible mechanisms to reduce radiosensitivity of animals by means of pharmacological substances administered to organism prior to irradiation. Since the chief biological

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

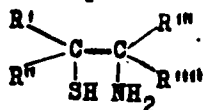
effect of ionizing radiation takes place through products of radiolysis, the protective agents should, first of all reduce the formation of active radicals and interaction with radiosensitive substances (Refs 3, 11, 30). Facts observed (Refs 3, 11, 31 to 50) lead to the conclusion that substances with a potential protective efficiency against ionizing radiation must necessarily show antioxidative properties. They must take an active part in transfer reactions, form intra-complex compounds with heavy metals, cause anoxia, and reduce exchange processes in the irradiated organism. The biological method is the only reliable one to evaluate protective agents. For being lengthy and tedious, however, investigators are compelled to look for simpler models. Experiments were performed on polymethacrylate (Refs 38, 42), fatty (Refs 51, 62 - Table 1), oxygen-containing (Ref 64), moniodine acetate (Ref 64 - Table 2), and enzyme models. These, presumably, cannot be considered a substitution for experiments to choose efficient protective agents, but, if an appropriate selection of models is carried out, a simplified choice of perspective groups of preparations and classes of chemical compounds could be achieved. It was first observed in 1949 (Refs 70, 71) that

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

chemical substances can reduce the effect of radiation. It was, however, only after the protective effect of β -mercapto ethyl amine (Ref 72) had been discovered that medical prophylaxis was recognized, and β -mercapto ethyl amine and the corresponding disulfide (cystamine) were experimentally and clinically used (Refs 1 to 5, 7, 9, 30, 38, 40, 63, 66, 68, 72 to 91). Methods of preparation and the protective effects of mercapto amines and their derivatives are described: β -mercapto ethyl amine $H_2NCH_2CH_2SH$ (Refs 30, 38, 63, 65, 68, 73, 75, 78, 92 to 95, 102, 105 to 108). The protective effects of some β -mercapto ethyl amine salts are shown in table 3. The oxidation rates of some amino mercaptans with oxygen in absence and presence of Fe^{2+} are shown on the figure (p 1499). In addition, mercapto amines having the general formula $HS(CH_2)_nNH_2$ ($n > 2$) (Table 4); mercapto amines having the general formula



(Table 5); N-substituted derivatives of

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

β -mercapto ethyl amine (Table 6); S-substituted derivatives of β -mercapto ethyl amine $R-S-CH_2CH_2NH_2$ (Table 7); N,S-substituted derivatives of β -mercapto ethyl amine (Table 8), and amino disulfides (Refs 3, 68, 95, 98, 167 to 169, 171, 172, 176) are discussed. From the thiocarbamates, the highest protective efficiency was shown by the sodium diethyldithiocarbamate (Table 9). Thiazolidine, thiazole, and thiazoline derivatives were investigated (Table 10). The syntheses and protective efficiencies of isothiuronium compounds (Table 11) and mercapto guanidine (Table 12) as well as of nitriles (Refs 6, 246 to 251 - Table 13), of aryloxy ketones (Refs 252 to 257, 41 - Table 14) as well as of amines and amino acids (Refs 30, 36, 38, 45, 71, 258 to 262 - Table 15 and 16) are described. Preparations showing the highest protective efficiencies are given in table 17. Practically, however, only amino thiols and isothiuronium compounds (cysteamine, cystamine, and S- β -amino ethyl isothiuronium) have been hitherto used. The principal shortcomings of the efficient preparations is their limited efficiency range (little difference between minimum efficient and minimum toxic doses), and the short term of their

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Chemical Prophylactics Against Acute Radiation Disease ⁶⁷⁷⁴⁸ SOV/74-28-12-23/25

protective efficiency. It has been established that the SH- and NH₂-groups are actively efficient in the protective agents.

Lack or substitution of these groups cause a considerable reduction of the protective effects of the preparations, or these become completely inefficient. There must be certain steric relations between these groups. It was observed (Ref 68) that, in dependence on the mutual position of the SH- and NH₂-groups in the molecule, preparations show either

protective (α -homocysteine, cysteine) or sensitizing (β -homocysteine, isocysteine) properties to ionizing radiation. A study of the relation between the chemical structure and the protective efficiency leads to the conclusion that it will be hardly possible to find any more efficient substances in the classes of chemical compounds hitherto investigated as compared to the substances already known. Since not all substances which are anti-oxidizing agents, show a protective efficiency, the protective agents must evidently have some additional properties. It has not yet been possible to establish the character of these properties, and the degree to

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Chemical Prophylactics Against Acute Radiation Disease SOV/74-28-12-23/25

which the protective efficiency is influenced by them. It can be assumed, however, that one of the most important properties of the protective agents is their capacity to penetrate into the cells, and to disperse between the individual tissues, and, moreover, their capacity to form complex compounds with such heavy metals which may initiate oxidative chain reactions. There are 1 figure, 17 tables, and 269 references, 47 of which are Soviet. ✓

ASSOCIATION: Voenno-Meditsinskaya akademiya im. S. M. Kirova (Military-medical Academy imeni S. M. Kirov)

Card 6/6

MOZZHUKHIN, A.S. (Leningrad)

Role of carbohydrate-phosphorus metabolism in the origin of the
excitation current in the skeletal muscles. Biul. eksp. biol. i
med. 47 no.4:3-6 Ap '59. (MIRA 12:7)

1. Predstavlena akademikom L.A. Orbeli [deceased].

(MUSCLES, physiol.

electrophysiol., eff. of carbohydrate-phosphorus metab.
disord. induced by pois. (Rus))

(CARBOHYDRATES, metab.

musc. carbohydrate-phosphorus metab. disord. induced by
pois., eff. on electrophysiol. (Rus))

(PHOSPHORUS, metab.

same)

MOZZHUKHIN, A.S. (Leningrad)

Role of the acetylcholine-cholinesterase system in the origin of
bioelectrical phenomena of the skeletal muscles. Biul.eksp.biol.
i med. 48 no.7:6-10 J1 '59. (MIRA 12:10)

1. Predstavlena akademikom L.A.Orbeli [deceased].
(ACETYLCHOLINE - metabolism)
(CHOLINESTERASE - metabolism)
(MUSCLES - physiology)

MOZZHUKHIN, A.S.; PEVZNER, D.L. (Leningrad)

Changes in cholinesterase activity in acute radiation sickness. *Biul. eksp.biol.i med.* 48 no.9:34-37 S '59. (MIRA 13:1)

1. Predstavlena akademikom L.A. Orbeli [deceased].
(CHOLINESTERASE metab.)
(RADIATION INJURY exper.)

MOZZHUKHIN, A.S. (Leningrad)

Changes in the e.m.f. of excitation of the skeletal muscles in frogs
with removed hypophysis or adrenals. Biul.eksp.biol. i med. 48
no.10:14-16 0 '59. (MIRA 13:2)

1. Predstavlena akademikom L.A. Orbeli [deceased].
(MUSCLES physiol.)
(ADRENALECTOMY eff.)
(HYPOPHYSECTOMY eff.)

MOZZHUKHIN, Aleksandr Sergeyevich; RACHINSKIY, F.Yu.

[Chemical treatment of radiation sickness] Khimicheskaya
profilaktika luchевой bolezni. Leningrad, Ob-vo po ras-
prostraneniю polit. i nauchn. znaniy RSFSR. 1960. 31 p.
(MIRA 14:11)

(RADIATION SICKNESS)

MOZZHUKHIN, A.S.; RACHINSKIY, F.Yu.; TANK, L.I.

Relation of chemical structure to the protective activity of various
mercaptoamines against X- and γ -radiations. Med.rad. 5 no.4:78-
81 Ap '60. (MIRA 13:12)

(RADIATION PROTECTION)
(ETHYLAMINE)

RACINSKI, F.I. [Rachinskiy, F.Yu.]; MOZJUHIN, A.S. [Mozzhukhin, A.S.];
SLAVACEVSKAIA, N.M. [Slavochevskaya, N.M.]; TANK, L.I.

Chemical agents for the prophylaxis of acute actinic diseases.
Analele chimie 15 no.2:65-106 Ap-Je '60. (EEAI 9:11)
(Radiation)

L'VOV, S.V.; SERAFIMOV, L.A.; MOZZHUKHIN, A.S.

Comparative efficiency of different systems for distilling the
binary mixtures of partial alloy mixing components. Khim.i tekhn.
topl.i masel 6 no.9:26-32 s '61. (MIRA 14:10)

1. Institut tonkoy khimicheskoy tekhnologii imeni M.V.Lomonosova.
(Distillation) (Mixtures)

MOZZHUKIN, A.S.

"The role of the carbohydrate-phosphorus metabolism in the origin of the skeletal frog's muscle excitation and injury current."

Report submitted, but not presented at the 22nd International
Congress of Physiological Sciences.
Leiden, the Netherlands 10-17 Sep 1962

L 12858-63
ACCESSION NR: AP3003942

EWI(1)/EWI(m)/BDS/ES(j)

AFTTC/AMD/ASD AR/K

S/0205/63/003/004/0626/0627

AUTHOR: Trincher, K. S.; Mozzhukhin, A. S.

57
56

TITLE: Correlation between the metabolism rate of a radiosensitive organ and the effective dose of a radioprotector

SOURCE: Radiobiologiya, v. 3, no. 4, 1963, 626-627

TOPIC TAGS: radioprotector, cysteamine, cysteamine radioprotector, metabolism rate, radiosensitive organ

ABSTRACT: Data on the dose of a radioprotector (cysteamine) used against irradiation with a lethal dose and the metabolism rate of the whole organism and individual organs (spleen, liver, muscle, and brain) are given for five warm-blooded animals: mice, rats, cats, rabbits, and dogs. No correlation was found between the effective dose of cysteamine and the metabolism rate for the whole organism of the animal or for liver, muscle, and brain. The ratio of the metabolism rate to the cysteamine dose for the liver was 0.154 for mice; 0.172 for rats; 0.110 for rabbits; 0.67 for cats; and 0.56 for dogs. The ratio for the whole organism was 1.13, 1.40, 0.47, 0.67, and 0.56, respectively. The ratio of the metabolism rate to the cysteamine dose was constant for all the experimental animals only in the

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L 12858-63
ACCESSION NR: AP3003942

case of the spleen: for mice it was 0.113; for rats, 0.127; for rabbits, 0.116; for cats, 0.112; and for dogs, 0.110. The data show that the effective dose of a radioprotector is directly proportional to the metabolism rate of the radiosensitive organs: the higher the metabolism rate of the radiosensitive organ, the greater the dose of the radioprotector used. Orig. art. has: 1 table and 1 figure.

ASSOCIATION: Institut biologicheskoy fiziki AN SSSR, Moscow (Institute of Biophysics, AN SSSR)

SUBMITTED: 23Apr63

DATE ACQ: 15Aug63

ENCL: 00

SUB CODE: AM

NO REF SOV: 001

OTHER: 000

Card 2/2

MOZZHUKHIN, A.S.; SERAFIMOV, L.A.; TIMOFEYEV, V.S.; TYURIKOV, I.D.

Apparatus and devices for laboratory rectification. Zav.lab. 29
no.4:503-505 '63. (MIRA 16:5)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii im.
M.V.Lomonosova.

(Distillation apparatus)

1 33553-65 EMO(J)/EWT(M)
ACCESSION NR AMOH2769

BOOK EXPLOITATION

Mozzhukhin, Aleksandr Sergeyevich; Rachinskiy, Foma YU'yevich

Chemical prevention of radiation injuries¹⁹ (Khimicheskaya profilaktika radiatsionnykh porazheniy), Moscow, Atomizdat, 1964, 243 p. illus., biblio. 3,000 copies printed.

TOPIC TAGS: radiation injury, radiation protection, radiation chemistry

TABLE OF CONTENTS [abridged]:

Introduction -- 3
Ch. I. Chemical changes caused by ionization and excitation of the molecules of the irradiated medium -- 6
Ch. II. Chemical protection of certain organic systems against ionizing radiation -- 29
Ch. III. Properties of radiation--protection substances and methods for their evaluation -- 40
Ch. IIII. Certain mechanisms of the biological effect of ionizing radiation -- 65
Ch. V. Chemical protection of biological subjects against X-rays and gamma rays -- 87

Card 1/2

L 33553-65

ACCESSION NR AM4042769

Ch. VI. Behavior of radiation--protection sulphur containing compounds in the organism of higher animals and man -- 150

Ch. VII. Effect of radiation-protection preparations on the functional condition of the organisms of higher animals and man -- 181

Ch. VIII. Possible mechanisms of the protective action of chemical prophylactics against radiation damage -- 216

Conclusion -- 241

SUBMITTED: 30Nov63

SUB CODE: CB, LS, PH

NO REF SOV: 313

OTHER: 437

Card 2/2

L 41613-65 EWG(j)/EWT(m) GS

ACCESSION NR: AT5008043

S/0000/64/000/000/0170/0178 19

AUTHOR: Mozzhukhin, A. S.; Rachinskiy, F. Yu.; Slavachevskaya, N. M.; Tank, L. I. BH

TITLE: Relation between the chemical structure and radiation-protective properties
in a series of aminothiols and certain of their derivatives 17

SOURCE: Patogenez, eksperimental'naya profilaktika i terapiya luchevykh porazheniy
(Pathogenesis, experimental prevention, and therapy of radiation injuries); sbornik
statey. Moscow, Izd-vo Meditsina, 1964, 170-178

TOPIC TAGS: radiation protection, radiation sickness, aminothiole

ABSTRACT: During the course of a search for new radiation-protection agents considerable numbers of mercaptoamines and mercaptoguanidines and a much smaller number of disulfides of mercaptoamines and thiazolidines were synthesized and studied. The results of tests performed on white mice are presented in five tables. The authors conclude that the functional groups which provide the protective action in the mercaptoamine molecule are the mercapto and amino groups with the optimum distance between functional groups not exceeding 2 to 3 carbon atoms. Similar results were obtained with the aminosulfides. Derivatives of aminothiols, aminodisulfides

Card 1/2

L 41613-65

ACCESSION NR: AT5008043

and mercaptoguanidines are no more effective with respect to radiation protection than the original compounds. Orig. art. has: 5 tables. 0

ASSOCIATION: none

SUBMITTED: 19Aug64

ENCL: 00

SUB CODE: LS, OC

NO REF SOV: 005

OTHER: 011

Card 2/2

JO

MOZZHUKHIN, A.S., polkovnik meditsinsky sluzhby, doktor biolog. nauk

I.M. Sechenov, founder of physiology in Russia; on the 135th anniversary of his birth. Voen.-med. zhur. no. 9: 83-86 '64. (MIRA 18, 5)

ACCESSION NR: AT4044495

S/0000/64/000/000/0187/0191

AUTHOR: Mozzhukhin, A. S.; Antipenko, Ye. N.; Makhlova, O. K., Mikhaylova, E.G., Pavlova, L. M., Tank, L. A.

TITLE: The effect of cystamine on the development of the regenerative processes after various doses and intensities of irradiation

SOURCE: Vosstanovitel'nyye protsessy* pri radiatsionnykh porazheniyakh (Recovery from radiation injuries); sbornik statey. Moscow, Atomizdat, 1964, 187-191

TOPIC TAGS: radiation sickness, radioprotective agent, cystamine, hematopoiesis, leukopenia

ABSTRACT: Experiments on mice exposed to various doses of x-radiation at a constant intensity of 30 r/minute showed that cystamine (150mg/kg i.p. 10-15 minutes prior to irradiation) increases the survival of mice, enlarging the LD_{50/30} by 300 r. The maximal effect was obtained at approximately 600 r, which is between the LD₅₀ and LD₁₀₀. Analogous results were obtained with gamma irradiation at a constant dose of 900 r but various intensities. The protective effect of cystamine (400mg/kg p.o. 30 minutes before irradiation)

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showed a maximum between 4 and 8 hours of irradiation. These data suggest that cystamine either strengthens the regenerative processes to varying degrees or at different rates in the different tissues and organs. Experiments with S³⁵-cystamine showed that it accumulates primarily in the radio-sensitive organs, particularly in the intestines and hematopoietic system (bone marrow and spleen). Injection of cystamine (60 mg/kg i.v.) 10-15 minutes before irradiation of dogs (500 r) decreased the extent and duration of leukopenia as compared to controls. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 29Jan64

ENCL: 00

SUB CODE: LS

NO REF SOV: 002

OTHER: 005

Card 2/2

SERAFIMOV, L.A.; TIMOFEEV, V.S.; MOLEKHIN, A.S.; POPOVA, L.M.;
CHIRIKOVA, I.I.; TYUMIKOV, I.B.

Study and calculation of the rectification process of multicomponent
mixtures by the separated vapors of the components. Khim. prom. 41
no.1:40-45 Jan 1965. (U.S.S.R. 19:3)

MOZZHUKHIN, A.S.; MAKHALOVA, O.K.; SOKOLOVA, Ye.N.

Effect of cystamine on the manifestation of pancytopenic syndrome
of the acute radiation sickness in dogs. Radiobiologiya 5
no.4:621-623 '65. (MIRA 18:9)

1. Voenno-meditsinskaya shkola ienina akademiya imeni S.M.
Kirova, Leningrad.

MOZZHUKHIN, A.S., inzh.

Atomizer for burning liquid phosphorus. Khim. i neft. mashinostr.
no.9:35 S '65. (MIRA 18:10)

L 10424-67 EWT(m)
 ACC NR: AT6031775 (A) SOURCE CODE: UR/2956/66/116/000/0095/0098
 AUTHOR: Mozshukhin, A. S.; Antipenko, Ye. N.; Mikhaylova, E. G. 30
 ORG: none
 TITLE: Significance of inhibiting chain radical processes in chemical prophylaxis of radiation injuries 19
 SOURCE: Moskovskoye obshchestvo ispytaley prirody. Trudy. Otdel biologicheskoy, v. 16, 1966, Svoobodnoradikal'nyye protsessy v biologicheskikh sistemakh (Processes of free radicals in biological systems), 95-98
 TOPIC TAGS: mouse, phenol, antiradiation drug, radiation injury, radiation chemistry
 ABSTRACT: If radiation injuries develop in an organism as a result of chain radical reactions as many authors suggest, then the development of these reactions may be inhibited by administering radioprotectors following irradiation as well as before. With screened phenols considered the most effective inhibitors of chain radical processes, the present study investigated the radioprotective effects of six ionol derivatives administered after irradiation. In experiments on white mice X-irradiated with single 400, 550 and 700 r doses, six ionol derivatives (formulas given) in peach oil were administered intraperitoneally 5 to 15 min after irradiation. In some of the experimental series, cystamine was administered prior to irradiation. Findings show

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that with 400 and 550 r doses the protective effect of the phenols is probably concealed by the protective effect of the peach oil, which is statistically reliable ($p < 0.05$). Not one of the phenol preparations displayed a statistically reliable radioprotective effect. However, when cystamine was administered prior to irradiation, the phenols did display a radioprotective effect. Thus, the phenol preparations appear capable of potentiating the effect of a radioprotector. Possibly, during irradiation cystamine prevents the formation of peroxides and radicals giving rise to chain reactions; this in turn promotes the manifestation of the radioprotective action of phenol derivatives, inhibiting the chain radical reactions taking place after irradiation. Orig. art. has: 2 tables.

SUB CODE: 06, 07/ SUM DATE: none/ ORIG REF: 005/ CTR REF: 003

ACC NR: AT6036655

SOURCE CODE: UR/0000/66/000/000/0282/0283

AUTHOR: ~~Mozzhukhin, A. S.~~; Kuznetsov, V. I.; Kushakovskaya, M. S.; Makhlova, O.K.; Goryachev, I. A.; Solntsev, S. A.; Shostak, V. I.; Kudrin, I. D.

ORG: none

TITLE: Effect of radioprotective drugs on the functional condition of the human organism [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24-27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 282-283

TOPIC TAGS: radiation protection, space pharmacology, cosmic radiation biologic effect, human physiology, space medicine, motion sickness

ABSTRACT:

The effect of cystamine on the functional condition of the human organism was studied (on the basis of the hypothesis of A. V. Lebedinskiy). Five hundred healthy volunteers were used. The maximum permissible dose of cystamine was established as a dose of 1.2 [units not given] per single application, or 0.8 units every 6 hr for 24 hr, or 0.6-0.8 units once a day for a month. Administration of cystamine in the doses indicated did not cause any significant changes in work capacity, hematopoiesis, or in cardiovascular

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lar, respiratory, digestive, excretory, or nervous system function. However, administration of cystamine did lead to complaints of lethargy and brief unpleasant sensations in the epigastrium in 10% of the cases. After administration of the drug some increase in sensitivity to motion sickness and to the effect of high temperatures was noted among subjects.

[H. A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 2/2

SOV/91-58-2-3/31

AUTHOR: Mozzhukhin, Ch.N., Engineer

TITLE: Reduction in Number of a Thermoelectric Power Plant's Personnel (Umen'sheniye chislennosti personala TETs)

PERIODICAL: Energetik, 1958, Nr 2, p 7-8 (USSR)

ABSTRACT: The author puts down a list of changes which have been introduced in the thermoelectric power station of a coking plant to reduce personnel. The power plant uses TP-35 boiler sets and AR-6-6 turbosets. Reduction of personnel was made possible chiefly by automation, and by reorganization of duties. The plant has the following basic sections: boiler section, turbine section, electric section, chemical water-filtering section. The burning process in the boiler sets has been automated. A combined mechanic and

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